

What is claimed is:

1. A method of displaying a digital image, the method comprising: acquiring a set of image data representative of a displayable static image; using a processing means to perform an analysis of the image data to identify characteristics of the image content; and generating, in the processing means, a set of video data for output to a display device connected to the processing means, the video data representing displayable motion over the static image and being generated in accordance with the image content characteristics.
- 10
2. A method according to claim 1, wherein the step of performing an analysis of the image data comprises/ determining which of a number of predefined image characteristics are present in the image, and wherein the step of generating the video data comprises executing an algorithm associated with those characteristics identified, the algorithm defining a rule or rules for generating a moving viewpoint over the image for display.
- 15
3. A method according to claim 2, wherein the step of performing an analysis of the image further comprises identifying a predefined image class wherein, in that image class, sub-parts of the image have predefined characteristics, and establishing index frames based on a close-up view of each identified sub-part, the step of generating the video data comprising executing an algorithm for determining a display path from one index frame to the next.
- 20
- 25
4. A method according to claim 3, wherein, in the step of generating the video data, the algorithm further determines at least one of (a) the order of the index frames to be displayed, (b) the amount of time for which each index frame is displayed, and (c) the nature of the transition between each index frame.
- 30
5. A method according to claim 3, wherein the step of identifying the predefined image class having sub-parts with predefined characteristics comprises identifying regions of interest and performing a feature recognition operation.

6. A method according to claim 5, wherein the step of performing feature recognition identifies human facial features, the step of establishing index frames thereafter comprising forming index frames based on a close-up view of the identified
5 facial features.

7. A method according to claim 6, wherein, having identified human facial features, the step of performing feature recognition further comprises comparing the facial features with a database of pre-stored facial features such that the step of forming
10 index frames is performed only for those facial features already present in the database.

8. A method according to claim 6, wherein the step of generating the video data to establish a display path comprises determining the orientation of the facial features identified, and generating a display path which follows the general gaze direction which
15 the facial features exhibit.

9. A method according to claim 2, wherein the step of performing an analysis of the stored image further comprises identifying a predefined image class wherein, in that image class, there is at least one dominant edge, line or curve, the step of generating the
20 video data comprising executing an algorithm for determining a display path following the at least one dominant edge, line or curve.

10. A method according to claim 2, wherein the step of performing an analysis of the image further comprises: (a) identifying a predefined image class wherein, in that
25 image class, there are both (i) image sub-parts having predefined characteristics, and (ii) dominant edges, lines or curves; and (b) establishing index frames based on a close-up view of each identified image sub-part in (i), the step of generating the video data comprising executing an algorithm for determining a display path moving between each index frame and following the dominant edges, lines or curves.

30
11. A method according to claim 2, wherein, in the step of generating the video data, the algorithm defines rules having a first level and at least one sub-level, the rules

in the first level relating to identification of a predefined image class and the rules in the at least one sub-level relating to options for generating the moving viewpoint for the image class identified, the method further comprising prompting the user manually to select an option in a sub-level.

5

12. A method according to claim 1, wherein the step of generating the video data comprises generating video data for a plurality of video sub-clips, each sub-clip representing displayable motion over a different part of the static image, and wherein the method further comprises an editing step for linking the sub-clips to form a second set of video data.

10

13. A method according to claim 1, wherein the image data is representative of a displayable photograph.

15

14. A method according to claim 13, wherein the generated video data is representative of a panning motion over the photograph, the initial and end frames representing salient parts of the image.

15. A computer program stored on a computer-usable medium, the computer program comprising computer-readable instructions for causing the computer to execute the steps of acquiring a set of image data representative of a displayable static image; using a processing means to perform an analysis of the image data to identify characteristics of the image content; and generating, in the processing means, a set of video data for output to a display device connected to the processing means, the video data representing displayable motion over the static image and being generated in accordance with the image content characteristics.

25

16. A computer system comprising a processor, a data port and a video port, the processor being arranged to receive image data representative of a displayable static image from the data port, and wherein the processor is further arranged to access and to perform an analysis of the image data to identify characteristics of the image content and to generate a set of video data representing displayable motion over the static image

according to the image content characteristics, the processor being arranged to output the video data to the video port for display.

17. A method of displaying a digital image, the method comprising: inputting a set of image data representative of a displayable static image into a processor; using the processor to automatically perform an analysis of the image data thereby to identify characteristics of the image content; and generating, using the processor, a set of video data for output to a display device connected to the processor, the video data representing displayable motion over the static image and being generated in accordance with the image content characteristics.

18. A method of automatically generating a moving image from a static image, the method comprising: inputting a set of image data representative of the static image into a processor; using the processor to automatically determine which of a number of predefined image characteristics are present in the image data; and generating, using the processor, a set of video data for output to a display device connected to the processor, the video data representing displayable motion over the static image and being generated by means of the processor executing an algorithm respectively associated with the or each image characteristic identified, the respective algorithm defining a rule or rules for generating a moving viewpoint over the image.

19. A method according to claim 18, wherein in the step of automatically determining which of a number of predefined image characteristics are present in the image data, the processor identifies at least one predefined image class, the or each image class being defined by image sub-parts having predefined characteristics, index frames thereafter being identified by the processor, each index frame being a scaled view of each identified sub-part, the step of generating the video data comprising executing a respective algorithm for determining a display path from one index frame to the next.

*Add
B1*